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H. HURLBUT, EDITOR.

[For Terms see last page]

### The Wheat Harvest.

On the first of July, (and probably in some instances earlier,) began the wheat harvest.—The growing prevalence of rust rendered it expedient to precipitate the cutting; but the large amount sown, and the scarcity of hands, of necessity caused much to be delayed—that which was cut earliest will doubtless give the best product. Of the varieties raised, the red chaff bald appears to have suffered most;—and contrary to what is usual, the injury is greater on openings than on timbered lands.

We learn by our exchanges and correspondents that the prevalence of rust has been general through the state, and the loss sustained from this source, especially on late sown fields, has been, by no means, inconsiderable. Yet, so great was the quantity sown, and so luxuriant the growth, that the crop is generally thought to exceed that of last year in amount, though not in quality. In this county opinions are various; but among those who ought to know best, viz: the farmers, the more prevalent one appears to be that there will be to some extent a falling off.

**THE NEW ENGLAND FARMER.**—This good old paper is no more. It had reached the close of its 24th volume, and was the oldest, as well as one of the soundest agricultural papers in the country. Under its several editors, Fessenden, Brown, Colman, Putnam and Breck, it has held the even tenor of its way with much

uniformity, and with undisputed ability and usefulness. We unite in the general regret at its discontinuance.

**THE HORTICULTURIST, and Journal of Rural Art and Rural Taste.**—The first number of this new publication has reached us, and in point of neatness of execution, variety of matter, and editorial ability, it is sufficient to say, it fully equals the expectations formed of it. We have no hesitation in recommending it as the first horticultural publication of the country. The following list of subjects treated of in this number will give the best idea of its contents. 1. Introductory Address; 2. Notes on a few fruits of superior excellence; 3. Rural Architecture—Design for improving an ordinary country house; 4. The two new ornamental trees—the Paulownia and the Deodar Cedar; 5. The five best winter pears; 6. The American Arbor Vitæ for screens and hedges; 7. Some account of the origin of the Boston Nectarine; 8. A preventive to the mildew in the gooseberry; 9. Notes on the black fig of the Azores—Culture of the fig under glass; 10. How to raise "giant" asparagus; 11. Climbing and pole roses for hardy culture; 12. Fruits in western New York—The Northern Spy apple; 13. Swainstone's Seedling Strawberry; 14. Remarks on the use of guano; 15. Culture of the laurel—Interesting fact in Horticulture; 16. On the culture of Peach orchards; 17. Is the naturalization of plants impossible; 18. Reviews; 19. Foreign notices; 20. Domestic notices.

A copy of the above work can be seen at our office: it would give us pleasure to forward the names of all who may wish to procure the work.

**BOOKS.**—Morrell's American Shepherd—price \$1 to \$1.25—Johnston's Catechism of Agricultural Chemistry—price 20 cents. For sale at this Office.

For the Michigan Farmer.

**The Commentator, No. 4.**

JULY NUMBER.

**"WHEAT AMONG CORN."** In addition to the objection of the difficulty of sowing the seed evenly among the corn as stated, is the time of giving the corn the last hoeing not being the suitable time for wheat-sowing; the time for the former being about the 1st July, and for the latter about the 1st September. Corn in this latitude, of the variety most usually cultivated, is commonly ripe enough to cut up (the best way of harvesting,) about the 1st September; consequently past the necessity of hoeing, although, an extra dressing might be given with the cultivator or harrow for that purpose. But for clover seedling, perhaps the fore part of July is the safest time in the year.

**"CULTIVATION OF SUMMER FALLOW."** The Cultivator, rigged for the purpose, is an excellent article on the summer fallow, whether it be turf or otherwise. Wrought ones, steel faced and kept sharp, are the only suitable articles for this use. If the summer fallow be greensward, it is always better not to disturb the turf until it is quite rotted; for it is better to plow but once, than to turn up the half rotten tufts to the surface. Sheep are good cultivators to clean the summer fallow and prepare it for wheat.

**"HOME-MADE GUANO."** The suggestion of N. H. is good. Always look about home for the means of enriching land, before sending abroad.

**"PREPARATION OF SEED WHEAT."** The lime is no doubt a preventive against smut. But whether the addition of salts is of any particular benefit in this respect, is doubtful. Take clean seed, (and if it is not so, *make it so*,) wet it thoroughly in any liquid, (whether in a solution of salts, brine or pure water,) then stir in as much fresh slacked lime as will adhere to it, and let it lie about 12 hours before sowing, and you need not fear smut.

**"HARRISON'S CULTIVATOR."** Hope to see them generally introduced. Where are they to be had? An Agricultural Warehouse in Michigan, where improved farm utensils of all kinds might be obtained, is much needed.

**"CURE OF HEAVES IN HORSES."** Was the amount of the compound specified intended for one dose only? [Yes.]

**"NEW MAGAZINE."** Whatever else may be taught in this publication, I very much doubt whether the public taste will be very much improved by the teachings of the editor in relation to rural cottages and dwellings, judging from the specimens I have seen of his designing. See Cultivator, p. 24, plan of cottage "which hath been dignified by the title of Elnwood!!" the designing of which is accredited to Mr. Downing. Such dandyified, gingerbread ornamenting is as unbecoming the substantial farmer, (or for that matter any one else,) as (to use Mr. Downing's own expression,) "the honest, dignified, plain farmer himself would be, if tricked out in the fashionable finery of the reigning Paris exquisite." Again, I dislike all servile imitation of foreign style, with their steep roofs and antique appearance, where neither good taste, convenience, or economy are consulted.

**"THE CROPS."** Wheat has been much injured by the rust. Corn looks well. Other spring crops have been somewhat shortened by the drouth.

J. F. C.

Kent Co. Mich., July 8th, 1846.

For the Michigan Farmer.

**A Corn-Marker and Grain-Rigging.**

MR. EDITOR:—My inquiries respecting "Farm Implements," in the June No. of the "Farmer," seem to have met with no response, except to be seconded by your "Commentator" correspondent. I will therefore venture, with your permission, to give a description of a *corn-marker* of my own construction, also a plan for a *grain-rigging*, suggested by a personal friend in this county.

The Corn-marker, though readily constructed, answered my expectations, and is designed to mark four rows, four feet apart. A piece of 3 by 4 scantling, 13 feet in length, was bored with  $1\frac{1}{2}$  inch auger holes 4 feet apart, into which wooden teeth are placed, extending about 10 inches below the scantling. I then cut off my scantling in the middle, and make a joint, by placing a piece of hard wood inch board 4 inches by 2 feet on either side where it is cut off, and bolting through the whole with a couple of common bed-screws, leaving it loose enough to play easy. The ends of the scantling should be about one inch apart, to admit of the necessary vibration on uneven ground. A common carriage pole was then attached to draw by. The points of draft are of consequence, in order to keep the extreme ends of the marker at right angles with the tongue, and not strain on the joint so as to prevent its easy vibration. A light, straight stick is placed in the hammer-bolt hole, with which to range with stakes stuck in the ground. A couple of handles standing backward, are placed in the marker, connected together at the top by a round stick, which answer to guide by &c. With such a marker, I marked straight, plainly and expeditiously, the marks remaining visible till my first hoeing, and through several rains.

For a grain-rigging, a *reach* should be prepared of sufficient length for bottom boards of 12 feet in length, which bottom should be tight enough to hold the loose grain. Two inch plank, about one foot wide, 12 feet long, will make sides: a couple of *natural crooks* about 7 feet across the segment, to be placed across the side boards, and crooked enough to clear the wheels, should be bolted down through the sides and bottom, and a narrow piece of hard wood going crosswise to support the bottom; a board is placed on either side on the ends of the *crooks*, which can be supported in the middle by a brace running up from the middle bearing under the box. Thus you can have a tight box to save loose grain, any desirable length and width for a large load, and by simply taking out 4 bolts, the rigging can all be taken to pieces. The side boards on the arms of the crooks, can be confined by a loose pin.

These "implements," though somewhat out of season this year, will certainly be in season for another year.

RUSTICS.

Grand Prairie, Kalamazoo Co., Mich.

We thank our correspondent for the above, and although we are sorry he was obliged to an-

swer his own inquiries, inasmuch as no one else was found to do it, we think it could hardly have been done more satisfactorily. Both contrivances, while they are simple and easily made, appear well adapted to their respective purposes. Ed.

### Education of Farmers' Daughters.

In the families of many farmers there are too many unproductive hands. In the changes which, since the introduction of extensive manufactories of cotton and woolen among us, have taken place in our habits of domestic labor, some of the internal resources of the farmer have been dried up, and new occasions of expenditure introduced. I cannot better illustrate this matter than by recurrence to a conversation which I had with one of our most respectable farmers of this country. "Sir," said he to me, "I am a widower, and have only one daughter at home. I have gone to the utmost extent of my limited means for her education. She is a good scholar, and has everywhere stood high in her classes, and acquitted herself to the satisfaction of her instructors.—She is expert in all the common branches of education. She reads Latin and French; she understands mineralogy and botany; and I can show you with pleasure some of her fine needlework, embroidery and drawings. In the loss of her mother she is my whole dependence; but instead of waiting upon me, I am obliged to hire a servant to wait upon her. I want her to take charge of my dairy, but she cannot think of milking; as her mother was anxious that her child should be saved from all hardships—for she used to say the poor girl would have enough of that by and by—she never allowed her to share in her labor; and therefore she knows no more of the care of the dairy, or indeed of house-keeping, than any city milliner; so in fact I have sold all my cows but one. This cow supplies us with what milk we want, but I buy my butter and cheese. I told her a few days since that my stockings were worn out, and that I had a good deal of wool in the chamber, which I wished she would card and spin. Her reply was in a tone of unaffected surprise, "Why father, no young lady does that; besides it is so much easier to send it to the mill and have it carded there." Well, I continued, you will knit the stockings, if I get the wool spun?—"Why, no, father! mother never taught me how to knit, because she said it would interfere with my lessons; and then if I knew how, it would take a great deal of time, and be much cheaper to buy the stockings at the store."

This incident illustrates perfectly the condition of many a farmer's family, and exhibits a serious drawback upon his property, and a great impediment to his success. The false notions which prevail among us in regard to labor, create a distaste for it; and the fact that, if the time required to be employed in many articles of household manufacture be reckoned at its ordinary value, the cost of making many articles of clothing would exceed that for which they could be purchased at the store, is deemed a sufficient reason for abandoning their production at home. In many cases, however, the time is turned to no account, but absolutely squandered. But the clothing, if not

made, must be bought; and they who might produce it must be sustained at an expense, whether they work or not. [Fourth annual Report of the American Central Board of Education.]

### Deep Plowing.

MESSRS. EDITORS:—There has been a good deal said of late about *deep plowing*, and it is time that the importance of it was more generally known among farmers. But what is *deep plowing*? Is it six inches, or is it from twelve to fifteen? I made an experiment in May, 1845, which cost me some time and trouble to perfect. The ground to be plowed was a piece of tough timothy sod, that had been mown six years, with some June and blue grass intermixed. In the process of plowing it, I used two plows; the first was the "Napierville Breaking Plow," turning about sixteen inches wide and three or four deep, according to the strength of the team. With another team and plow, (the one I used was Mr. Gifford's bold faced steel plow,) I followed in the same furrow, raising about six or seven inches of subsoil and scattering it *broadcast* over the preceding furrow. The after plow was made to follow the first by setting the clevis so much one side as to have two inches at least next to the land unbroken, in order to give the first furrow room to turn upon, that it might lie as flat as possible. The whole field (it was all broken in one "land") when finished, had the appearance of an old field. It was then harrowed twice over with a heavy harrow, marked, and planted with corn. The corn received but little attention, yet it was better than any I had on old land, and no timothy or any other grass was to be seen in the fall. There is now a crop of wheat growing upon the same ground, which I shall endeavor to keep by itself and *perhaps* enter it for the first premium next October.

This spring I have plowed my corn ground about fifteen inches deep, using two heavy yoke of oxen. I may give you the result at some future time.—*Prairie Farmer.*

### Fall Grafting.

Capt. Josiah Lovett, who is distinguished for his success in raising superior vegetables and fruits has given in the Magazine of Horticulture, his mode of fall grafting, by which he is enabled to get fine fruit from the scions the next season:

Your remarks in the November number of the Magazine, for 1843, page 423, respecting my mode of procuring the specimens of fruit presented on several occasions at the Horticultural Society's rooms, last autumn, is partly incorrect; they were not procured by budding but by grafting. I have practiced budding with fruit-buds for some eight years past, and occasionally succeeded in getting good fruit from them. It is now three years since I have begun grafting with fruit-wood in autumn, (and I never heard of any person attempting it previous to that time,) thus far I have been eminently successful with the pear and apple, (occasionally with the plum;) the grafts thus set have been more certain to mature their fruit, than the trees from which the grafts were cut; this can only be accounted for by supposing the sap to flow slower in the graft in the spring, in



consequence of there not having been a perfect union with the stock in autumn; and the grafts not blooming or setting their fruit quite as early as the tree from which they were cut, escape the injurious effects of our late spring frosts and cold north-east storms, to which, in our climate, we are so subject.

I select a healthy shoot for a scion, with fruit-buds on it; I have them set a foot long with one or two side-shoots. Immediately remove the leaves, and cut on one side in a sloping direction, to a point, the cut from one to two inches long; then with a sharp knife I begin at the point and cut just within the bark, up about half an inch above the commencement of the incision on the opposite side; then select a thrifty upright shoot, on a healthy tree, cutting well back, making a short stump; cut this stump in the same manner as the scion, reversed, and carefully but firmly bush one with the other; secure with bass or Russia matting, and cover with clay; or I prefer to mix equal parts of Beeswax and Burgundy pitch; a less quantity of resin will answer in the room of pitch; soften to a proper consistency with hog's lard, and melt together, and spread on cotton shirting; and then cut in strips of one-half to three-quarters of an inch wide, and after uniting graft and stock, bind with the cotton side next to the bark. The composition ought not to come in contact with the bark, as the bandage should be left on through the winter. If the grafts are carried any distance before uniting to the stock, it will be very important that the leaves be cut off under the tree, and the ends, as soon as possible, dipped in wax or something adhesive.

JOSIAH LOVETT.

*Beverly, March 5, 1844.*

N. B. The mode of grafting above described, is very similar to what is called whip-grafting by some, though I take much less wood with the bark than I have seen gentlemen do who graft by that mode.—*Ex. Paper.*

### Management of a Good Farmer.

[The highest premium on farms, was awarded by the Committee of the N. Y. State Agricultural Society, to Mr. Geo. Geldes, of Onondaga Co. The following are some particulars of his mode of management submitted by him in answer to the interrogatories of the Committee.]

My home farm consists of three hundred acres. Thirty are in wood. About ten acres of the side hills are unsuitable for plowing, and are only used for pasture; the remainder is under cultivation, except what is required for roads, yards, &c.

I consider the best modes of improving the soil of my farm to be deep plowing, application of barn-yard manure, free use of sulphate of lime, and frequent plowing in crops of clover.

I apply my barn yard manure in large quantities at a time, preferring to at once do all for a field that I can in this way. About fifty loads of thirty bushels each, of half rotted manure to the acre at a dressing.

My stables are situated on two sides of a square; the manure, as it is taken from the stables, is at once piled in the centre of the yard, as high as a man can pitch it. Sulphate of lime is put on the manure in the stables, and the heap,

as soon as fermentation commences, is whitened over with it. My sheep are all fed under cover, and most of their manure is piled under cover in the spring, and rotted. As to keeping manure under cover, my experience has led me to believe, that the best way is to pile it under cover, when it is most convenient to do so, and only then as I am compelled to apply water to the heap to rot it, unless it has received the snows and rains out doors. The coating of sulphate of lime, will, I believe, prevent loss of the gases, and in process of fermentation the heap will settle so close together, that water will not after that enter into it, to any considerable depth, particularly if it was piled high and came up to a sharp point.

My means of collecting and making manure, are the straw, corn stalks, and hay raised on the farm, fed to farm stock, and what is not eaten, trampled under foot, and converted as before described, so much of it as goes through the stables. But large quantities of straw never pass through the stables at all; stacks are built in the yards, and the straw is from time to time strewn over the ground, where it receives the snows and rains, and is trampled by the cattle. Embankments around the lower sides of the yard, prevent the water from running off, and confine it in water tight pools, which are filled with straw to absorb the water, except so much of it as is wanted to put on the garden.

I make from four to five hundred loads of manure annually, and it is all applied.

Most of the manure is put on corn ground.—It is drawn on about one-half rotted, and spread over the surface, and plowed under about four inches deep. The reason I do not plow it under deeper is, that I suppose I must plow deeper the next time to bring up the earth into which the manure has been carried by the rains.

I raised this year about

|   |               |       |          |
|---|---------------|-------|----------|
| 77 acres wheat yield'g 1,616 bu., averaging |               |       |          |
|   | per. acre,    |       | 20.99    |
| 15½   | " corn, "     | 821   | " 52.96  |
| 18  | " barley, "   | 665   | " 36.94  |
| 38  | " oats, "     | 2,249 | " 56.55  |
| 2½  | " potatoes, " | 292   | " 116.80 |
| <hr/>                                       |               |       |          |
| 5,643                                       |               |       |          |

50 acres of pasture and 30 of meadow.

I sow wheat at the rate of two bushels to the acre, about the fifteenth day of September. I summer fallow but little and only to kill foul stuff, and to bring the land into a good state of cultivation.—A part of my wheat is sown on land that has been pastured, or mowed, plowing it but once, but that done with great care, and as deep as I can. The oat and barley stubble, as a general rule is sown to wheat, plowing only once, having previously fed off the stubble with sheep so close as to have most of the scattered grain picked up. The plowing is done as near the time of sowing the wheat as is practicable, and the wheat is sown upon the fresh furrows, and harrowed in. I have tried various modes of treating stubble, but none of them has answered as well as this. What little grain of the spring crop is left on the ground is turned deep under, and the wheat being on top gets the start of it. The harvesting is done with a cradle. Corn, is generally planted by the tenth day of May, on sod land; most of the manure is put up—

on this crop. The corn is planted in hills three feet apart each way; from four to six kernels in a hill, and no thinning out is practised. Sulphate of lime, or ashes is put on the corn as soon as it comes up. Two effectual hoeings are given to it, and a cultivator with *steel* teeth, is run twice each way of the field between the rows, to prepare it for the hoe. Corn plows and cast iron cultivator teeth are entirely discarded.

At the proper time, the stalks are cut up at the surface of the ground, and put into small stacks, and when the corn is husked, the stalks are drawn at once into the barn, without being again set up. In this way they are kept in good condition, and labor saved.

Oats or barley is sown the next spring, on this corn stubble. Of each of these grains, three bushels of seed is put upon an acre. As soon as the grain is up, sulphate of lime is sown. These grains are also sowed on sod land. The reason of this is, I cannot command the manual labor necessary to cultivate *one-fifth* of my land in corn, and secure it at the proper season. The rotation of crops I attempt to pursue, is—first corn second oats or barley, third wheat on the oat or barley stubble, fourth clover and herds grass pasture—the seed sown on the wheat—fifth meadow. But inasmuch as certain portions of my farm are not suited to raising wheat, and as I cannot command the force necessary to cultivate the proportion of corn, I am compelled to modify; but I come as near to this rotation as I can.

The usual time of sowing barley is as soon as the ground is settled—commonly by the 20th of April. The oats are sowed later generally early in May.

The yield of the crops for this year has already been given, and I think I am safe in saying, that the average of one year with another, upon the system of rotation before given, comes up to that of this year. The pasture will sustain two cows upon an acre, and the hay will generally yield two tons to the acre.

My reasons for applying my manure to corn, are, that I have better means of destroying the seeds of weeds, and from the belief that corn is the best crop to take up that part of the manure that the first crop can use, and that the manure is thus prepared for the crops that follow. Experiments that I have made, go to show that, coarse manure benefits the second crop as much as it does the first—and the third crop cannot but receive great benefit from it. The fourth and fifth crops probably do not impoverish the soil. By this rotation, three crops are had for three plowings; and my experience proves that the soil increases in fertility under this management.

Herds grass, at the rate of eight quarts to the acre, is sown on bottom land. Clover and herds grass, mixed in equal quantities, is sown on uplands, at the rate of eight quarts to the acre, commonly. Generally sow herds grass in September, when it is sown alone on wheat; but if mixed with clover, sow it in March, on a light snow, if possible; the sowing is done by hand. The last spring, I sowed herds grass seed at the rate of eight quarts to the acre, on a field of wheat that I wanted to mow. Sixteen quarts of clover seed were mixed with the other seed and sown on fifteen and a half acres. In the fall this field was

not fed off until the clover headed out, when it appeared finely covered with clover.

I usually mow about thirty acres, and expect two tons to the acre. This year the herds grass was killed by a frost late in May, and the estimate made was one ton to the acre. I use the variety of clover known as the "medium," and cut it when one-half of the heads are turned.—At this stage, a very considerable proportion of the herds grass will be sufficiently advanced for the seeds to mature. The mode of making the hay, is to move it as little as possible. Generally it is put into cock. When the bottom lands are stocked down, clear herds grass used.

Of the bottom lands, about twenty acres were very wet, and may have come under the denomination of "low peat lands." This land has been thoroughly drained, with ditches from three to five feet deep. Very heavy oats were this year raised upon some of this land, and about one-half of my corn was upon this description of land.—The next year, the whole forty acres are to be planted or sown to oats.

There have been four oxen, seventeen cows, and sixteen head of store cattle, eighty sheep, eleven horses, and thirty three swine kept on the farm the past season, with the exception of a short time. The cattle are either thorough bred, or high grade short horns.

No accurate experiments have been made by me, to test the value of roots as compared with Indian corn. I fatten my hogs and cattle on corn ground with the cob. Cooked for hogs, and sometimes cooked and sometimes raw for cattle, being governed in this particular by the amount of grain I am feeding. I think corn the most economical grain I can raise to feed, in view of the prices coarse grains usually bring in market.

There are about two hundred apple trees on the farm, most of them grafted—spitzenbergs, russets, pippins, &c.,—most of the approved varieties.

Pears, peaches, plums, cherries, quinces, &c., are raised in abundance for our own consumption; and we have many of the best varieties of these fruits; five or six of pears, twenty of peaches, seven or eight of cherries, and four or five of plums.

Various insects common to this country have depredated upon the fruit trees; the most troublesome of all, is the common apple tree worm.—Strong soap suds applied by means of a piece of sheep skin with the wool on, attached to a pole is the most effectual means of destroying them.

My general management of fruit trees is, to prune them annually, keep them free from insects, and see personally to the selection of scions for grafting.

Besides the mansion house, I have four houses occupied by men that work on the farm. Two of these houses have barns connected with them.—In a central position is a grain barn, fifty-four feet long and forty wide, twenty feet high with a stone wall under it—making a granary and sheds.—Near the mansion house are the hay barn, sheep barn, and a grain barn fifty-four feet long by thirty-four wide. Basement stories to all these buildings, furnish sheds and stables for the stock; so that every animal I winter, is fed all the valuable food in a rack or manger, and under cover.

Besides these buildings, is the wagon-house,

forty-two feet long, with a basement under it; and the tool-house, carriage-house, corn-house, milk-house, smoke-house, ice-house, hen-house, &c.—A small mill upon the brook grinds my coarse feed. My yards around the buildings near the mansion are all supplied with water in tubs, sent there by a powerful force pump under the mill, driven by the same wheel that grinds the feed and saws the wood.

From the farm-book, it appears that there have been nine hundred and twenty-seven days' work done on the farm, from the 1st day of April to the 1st day of November. This account covers all the work done in drawing plaster, sowing it, draw-out manure, threshing and delivering so much of the grain in market as has been sold, and all other men's labor on the farm. There have been produced on the farm five thousand six hundred and forty-three bushels of grain, aside from garden vegetables. Besides this, sixty-six loads of hay.

As the grain is sold, entries are made in the farm book, of the price it brings; and that part of the products of the farm that is kept for home consumption, is estimated at the price it is worth in market. Thus arrived at, the grain and hay raised this year was worth three thousand five hundred and twenty-three dollars and seventy-nine cents.

I have no means of determining the value of the pasture, fruit, and many other things produced on the farm, nor the cost of team work.

GEO. GEDDES.

*Fair Mount, Onondaga Co., N. Y., Dec. 31 '45.*

From the American Agriculturist.

### A Chapter on Apples.

The great advantage of fruit raising to the farmer has been often commended through our columns. It is not our intention to enlarge upon its general merits at present, but to confine what we have to say to the subject of apples alone.

The apple is, beyond all question, the king of fruits; as wheat and the potatoe are of grain and roots. In some one or more of its varieties, it keeps throughout the three hundred and sixty-five days of the year; and long after the earliest June-eating and sweet-bough, with their glossy sides and fragrant odor, are offered in the market, the piles of smooth greenings and pippins, and rough golden coated russets, with all the firmness and substantial merits of veterans of '76, are tempting the eye and olfactories of every beholder by their plump and but just matured perfections.—It is to this quality of enduringness, that much of the merits of the apple are due. But much more it may justly claim, in its luscious flavor and healthful influences, and its peculiar adaptation to so large and varied uses. Besides the thousand-and-one varieties of dishes of which it forms the sole, principal, or a subordinate part in the economy of the skillful housewife, it contributes greatly towards the interest of the farmer by the profits from its sale, and its use as food for his stock.

The profit from feeding the surplus of an extensive orchard of fine fruit to stock (for fine fruit is as much better for animals as it is for their owners,) has become an item of careful estimate,

since the nearly general abandonment of the wasteful, sottish system of cider-making. It was the rule, we believe, that 8 to 12 bushels of apples would make one barrel of cider, and 8 to 12 barrels of cider, one barrel of cider brandy.—The former was made to the halves, while, perhaps, two gallons of the latter might be returned as a full equivalent for a barrel of the former.—Two gallons of miserable liquid poison, under the name of cider brandy, was, within less than a generation since, the product of 8 to 12 bushels of apples! Let us see how the case stands by the touchstone of figures. Eight bushels of good apples (and it is cheaper raising good apples than poor,) are worth in an average of seasons, 37½ cents per bushel in the orchard, or \$3 for the whole; while the two gallons of brandy would be worth about the same price of whisky, say 50 cents—difference in favor of selling the apples, or using them for some appropriate purpose, six to one. Verily, the present age has improved some in pocket, as well as morals.

The value of apples, however, for feeding to stock, is not equal to that for selling, whenever a good market is within reach. The early droppings from the trees should be invariably fed to stock; as besides their general worthlessness for other purposes, from their immaturity, they frequently contain worms, which their consumption by stock effectually destroys. The most economical way for providing for this is to allow swine to run at large in sufficient numbers to consume all the first droppings. These, with the offal of the dairy, and a good clover pasture, with a trifle of meal, thoroughly soured with the whey or slops, will put a good breed of hogs into fine condition, if kept out of the road, by the time peas, potatoes and corn are sufficiently matured to begin their fall feeding. If there should be any surplus of apples, beyond what may be more profitably disposed of, these may be fed to the fattening porkers, either raw or cooked, with certain advantage. The exact equivalent in grain or roots, for pork or beef making, has not been ascertained with sufficient accuracy to be here stated, but that they stand high in fattening properties, is beyond a doubt; while the quality of meat they produce, is of the highest order.

Sheep may be substituted for swine in ranging through the orchard and picking up the diseased and immatured fruit. They will not hurt store sheep either in flesh or fleece, but they are more particularly profitable for such as are intended for mutton. A run in the orchard is an excellent preparation for heavier feed at a later period in the season, and richer or more highly flavored mutton cannot be produced than is afforded from such as have this food continued to them, till ready for the shambles.

Milk Cows thrive on them exceedingly, though they should never be allowed to run among the trees, from their injuring the limbs, and their liability to be choked in taking the apples from an elevated position. The milk from cows so fed, is noted for its richness and deliciousness of flavor. For working cattle and such as are not intended for beef, they are nearly as valuable.

Horses are also exceedingly fond of apples, and few kinds of stock are more benefitted by their use. They are a full substitute for grain, with



hay, when not too hardly used, and it has been found from long experience and careful observation, that their health is better when so fed, their coat is smoother and more glossy, and that they are equally spirited.

The quality of apples has much to do with their value; though probably not more than that of roots and grain. Such kinds should be selected for feeding, if that be the object, which are, as a general rule, the most profitable for sale; as they will be found to combine the best flavor with the most substance. Sour apples have been proved from careful experiments to be equally nutritious for stock as sweet, but it must be remembered, that they soon set the teeth on edge, and cannot be continuously fed in considerable quantities, with advantage to the thrift of animals. Boiling would remedy this objection, but it is more easily obviated by alternating sweet with sour; or if an orchard is to be set out or grafted, expressly in reference to this object, sweet apples may almost entirely predominate.

*Poultry* comes into the long list of consumers of the apple orchard; and no less good does it do them, than the other tenants of the farm. Of apples, of a soft, delicate, delicious pulp, we have had more than a peck per day consumed by a small flock of hens and chickens. Turkeys, ducks and geese are equally fond of them.

Some prejudice has been created against the use of apples for stock, from the fact, that when a hungry cow happened to break into an orchard and filled herself to repletion, a fever ensued, and her milk dried up. The same rule would hold good against allowing a horse a ration of grain, because one had died from an unstinted feed of corn. The true course is, to commence feeding in small quantities, and gradually increase the allowance till put on full rations.

When the apple is fed to the larger animals, hay and grass should always accompany it; and when fed to hogs, fresh clover or grain should be added. When thus judiciously managed, we doubt if the production of roots for stock feeding, will compare in economy, with that of raising apples for a similar purpose. It is true that they are sometimes cut off by late frosts, and are not vegetables and grain equally liable to injury and disappointment? In conclusion, we can offer no better advice to our readers, than to urge them to plant as extensive orchards as they can manage to advantage, of the choicest fruits they can select, and whether intended as an investment of their money, as food for their families, or domestic animals, or as an inheritance for their heirs, they can make no more appropriate bestowment of their time and wealth.

From the Horticulturist.

### How to raise "Giant" Asparagus.

MR. EDITOR:—There are sold in the seed-stores several sorts of Asparagus, which claim to grow to unusual size, and produce giant stalks. I have bought and planted these sorts, and have found them not perceptibly different from the common old sort.

I want to tell you and your readers, if you will have a little patience with me, how I grow common Asparagus, so that it will always rival any

giant production, whether from Brobdignag or Kentucky. Every one who has seen my beds, has begged me for the seed—thinking it a new sort—but I have pointed to the *manure heap*—(the farmer's best bank)—and told them that the secret all lay there. The seed was only such as might be had in every garden.

About the 1st of November—as soon as the frost has well blackened the Asparagus tops—I take a scythe, and mow all close down to the surface of the bed; let it lie a day or two, then set fire to the heap of stalks; burn it to ashes, and spread the ashes over the surface of the bed.

I then go to my barn-yard; I take a load of clean, fresh stable manure, and add thereto, half a bushel of hen-dung; turning over and mixing the whole together, throughout. This makes a pretty powerful compost. I apply one such load to every twenty feet in length of my Asparagus beds, which are six feet wide. With a strong three pronged *spud*, or fork, I dig this dressing under. The whole is now left for the winter.

In the spring, as early as possible, I turn the top of the bed over lightly, once more. Now, as the Asparagus naturally grows on this side of the ocean, and loves salt water, I give it an annual supply of its favorite condiment. I cover the surface of the bed about a quarter of an inch thick with fine packing salt; it is not too much. As the spring rains come down, it gradually dissolves. Not a weed will appear during the whole season. Every thing else, pig-weed, chick-weed, purslane, all refuse to grow on the top of my briny Asparagus beds. But it would do your eyes good to see the strong, stout, tender stalks of the vegetable itself, pushing through the surface early in the season. I do not at all stretch a point, when I say that they are often as large round as my hoe handle, and as tender and succulent as any I ever tasted. The same round of treatment is given to my bed every year.

I have a word to say about *cutting* Asparagus, and then I am done. Market gardeners, and I believe a good many other people, cut Asparagus as soon as the point of the shoot pushes an inch or two through the ground. They have then about two inches of what grows above ground, and about four or six inches of what grows below. The latter looks *white* and tempting; I suppose people think that for the same reason that the white part of Celery is tender, the white part of Asparagus must be too. There is as much difference, as there is between a goose and a gander. It is as tough as a stick; and this is the reason why people, when it is boiled, always are forced to eat the tops and leave the bottom of the shoots on their plates.

My way is, never to cut any shoots of Asparagus below the surface of the ground. Cut it as soon as it has grown to proper height, say five or six inches above ground. The whole is then green, but it is all *tender*. Served with a little drawn butter, it will melt in your mouth. If your readers have any doubt of this, from having been in the habit, all their lives, of eating hard sticks of white Asparagus, only let them cut it both ways, and boil it on the same day, keeping the two lots separate, and my word for it, they will never cut another stalk below the surface of the bed.

Yours, &c.

T. B.

**Michigan Sub-Soil (or trench) Plow.**

This instrument having been several times referred to in our columns in terms of approbation, we were desirous of ascertaining with certainty concerning its merits, and whether any difficulty were met with in its practical operation, an ignorance of which might mislead those who should be disposed to give it a trial. With this view we addressed a letter to the Hon. S. V. R. Trowbridge of Oakland County, who we know had long used this plow upon his farm, and whose testimony on the subject could be relied on as that of one disinterested and quite conversant with its operation, requesting a full account of the merits and demerits of the plow as developed in practice, and particularly whether it was found to operate well in stony ground, whether it was efficient in destroying sorrel and other weeds—what amount of team was required to plow the assigned depth, and generally, whether the plow came up in every respect to what had been said of it. To that letter we have received the following answer, which we take pleasure in laying before our readers.

ED.

For the Michigan Farmer.

MR. HURLBUT,—

DEAR SIR:—I have received your communication enquiring about Smith's sub-soil plow, and asking certain questions in relation to the operation of it.

This plow has been in use here, some three or four years, and as far as I get the opinion of my brother farmers it gives good satisfaction.

It is simply two plows upon one beam, the forward one is smaller, shorter sheath, and (after one furrow is plowed,) cuts a slice from 3 to 5 inches thick, and turns it bottom side up in the bottom of a 10 inch furrow. The mould-board of the rear plow is so made as to raise another slice, (5 inches thick,) and roll it entirely upon the top of the last mentioned furrow. This sub-soil, as it rises, becomes pulverized, and presents a surface similar to summer fallow, harrowed and cross plowed. This is simply the operation of the plow. It is a great improvement, and will promote the fertility of any soil. It may not be the only plow to be used under all circumstances; but where land is inclined to June grass, sorrel, Indian grass, or any noxious weed, it is superior to any other, and in turning sod land, not the least grass can be discovered after being turned with the plow.

You speak about humbugs: it is well for farmers to be on their guard against such imposition. As a class of men, they are much imposed upon. The philosophy of managing land in this manner seems sound. My fears were, the draft would be so great it would be

like the Indian's gun, "to cost more than it would come to." I find, however, one yoke of good oxen and a span of horses are able to plow any soils when not too dry.

I have cut a number of ditches upon my farm, and the grass and grain is always best on the very bank of a ditch. I judge therefore, sub-soil plowing to be good.

I have plowed a very stony piece of land in one of my fields lately, and am convinced no other plow would have done it as well. They break no oftener than other plows. The effect upon land in two or three years must be beneficial.

My nearest neighbor said to me a few days since, "The sub-soil plow has spoiled my land for wheat—it is too rich." Another large and good farmer in this town, uses no other plow. His farm is a strong tenacious clay soil, (timbered land.) His wheat was very large. He seems convinced this plow is indispensable for him.

Mr. Smith, who lives in this village, has made a smaller size to be used with one pair of horses. It works well, and when farmers have light teams, this will be preferred.

Another neighbor, who is very enthusiastic about the plow, said on Saturday last, "If I could not get another, I would not take one hundred dollars for mine."

In relation to our present crops, the wheat on low rich land is all injured by the rust,—some very seriously; on the oak land, it is good. The crop in this county will be better than was expected before harvest.

I have written this in the midst of harvest and hurry, and you must excuse any mistakes.

Your obt. serv't.,

STEPHEN V. R. TROWBRIDGE.

P. S. A farmer near this village has raised wheat for three consecutive years on the same field, by using this plow, and he says the present crop is equal if not superior to any previous one, and better than another field which he summer fallowed after the old method.

**Wheat Among Corn.**

The time intended for sowing wheat among corn is about the first of September. Many fields of corn, we think, are not ready to cut up before from the middle to the last of that month; though the time, of course, varies according to the variety raised. The corn at that period, it is true, does not need the cultivation which the process of covering the wheat gives it—but this process will serve the purpose of preventing some weeds (which are generally to be met with in cornfields at that season, just approaching maturity,) from going to seed.

The idea of sowing wheat in this manner is



no new one. It has long been practiced by our neighbors farther south, and has been found to answer well. Perhaps the method is better adapted to fields of the *dent* corn, which is extensively cultivated in the Southern and South-Western counties of Michigan, than to those of the smaller and earlier varieties. In some parts of New England, however, the practice long ago prevailed of sowing rye in the manner suggested for wheat, among corn of the same varieties that are raised in the northern portion of our state, after it had attained its full growth some time in the month of August.

We would not be understood as recommending this method as in all cases the best for raising wheat. But we believe it generally better than the naked summer fallow, and that it may occasionally be resorted to by the farmer with much advantage, as for instance, on very rich lands, and when a field designed for a fall crop of wheat has become foul—especially if so situated as not to admit of turning on sheep.

From the Farmers' Cabinet.

#### Transplanting Large Trees.

I intend to remove the balance of the plum trees from the garden next spring. The tree above spoken of as promising fruit, which is from fifteen to eighteen inches in circumference, was removed in the fore part of April. This was planted in the following manner.—I have planted some two hundred fruit and forest trees this spring in this way, and they bid fair to thrive, almost without any exception. Trees obtained from the woods, such as oak, ash, beech, &c., are admitted by all to be hard to transplant successfully, as the roots are large runners, with but few fibres, which are the really important part. The beeches thus obtained have made from eight to ten inches of new wood on the main shoots already, though they have been put out less than two months. To many of your readers it may not be original, though to others I apprehend it will be new. It was communicated by a distinguished manufacturer on the Brandywine, who is as well skilled in the art and mystery of rural life, as in his fabrics; and whose place, I am told—though I have not seen it—might almost compare with "Hagley," which Lyttleton, "by his taste in rural ornament, rendered the most attractive residence in England." He confesses to having obtained the secret from his lady—so that whatever credit there is in the matter belongs to the fair part of the creation. It was communicated as being adapted particularly to evergreens, but I have extended it to all, with the greatest apparent success. It is simply this:—Dig a hole sufficiently wide and deep—but not too deep—to receive the roots of the tree; put back of the top soil, sufficient to fill the hole half

full. Then add sufficient water—not well or spring water, if it can be avoided—to reduce this into a thin mortar or mud; incorporate well, and place the tree in its position, working it up and down till it reaches the bottom of the hole; now complete the filling, and tread down gently. The tree will at first appear loose and slightly supported, but in twenty-four hours, or as soon as the superfluous water has passed away, the tree will appear to have grown there; and if not large will do very well without support. To protect the tree against the droughts of midsummer, it is my practice to raise a mound of earth from four to eight inches around the body, to be removed after the first season. It should be dishing towards the tree.

[The success of this, or any other method of transplanting large trees is more certain and complete, when a ditch is dug around each tree in the spring, at a distance that will leave sufficient root, carrying the ditch below all the roots, and cutting them off in its progress down, and again refilling the ditch. The remaining roots will immediately send out fibres which will greatly assist the tree when it comes to be removed the next fall or spring.]

For the Michigan Farmer.

#### An Experiment in Wheat Growing.

MR. EDITOR:—I have just harvested over 30 acres of handsome plump wheat of the White Flint variety, the first crop on some of our richest heavy timbered land, giving a large yield:—and as this is a result not always attained by wheat growers under such circumstances, I have thought a mention of my method of procedure might be serviceable to others.

The difficulties commonly met with on such land as the above mentioned, are, an excessive growth of straw, and a liability to rust. To obviate these I practiced, 1st thick sowing—having always remarked that when seed is sown thickly, the straw is shorter and smaller. Such straw is less liable to rust than that of ranker growth. As a further protection against rust, I sowed early, between the 1st and 10th of September.

To these two precautions I attribute the exemption of my crop from the rust which has this year been so extensively prevalent, and which was found to some extent, in the fields of my neighbors in the vicinity of mine.—Theirs were sown later and more thinly.

Jackson, July 15th, 1846.

D.

SEED WHEAT.—As the present crop is somewhat deficient in plumpness, and as old wheat is, at any rate, better for seed than new, we would recommend all who have it on hand to sow last year's wheat. See the article under the caption "Seed," in our last number.

### Manure.

It is well known that in a close stable, where there are a good many horses, there is a very pungent smell, affecting the eyes and nose, more particularly when the stable is being cleaned out. This smell is occasioned by the flying off of ammonia, which is the essence of manure, and which volatilizes or flies off at a very low temperature—even the warmth of the manure in a stable will send it off, and it goes off in great quantities by the common heat of the manure in a farm yard, whether thrown up in heaps or not. There is, however, a very cheap and simple remedy for this. Before you begin to clear out your stable, dissolve some common salt in water; if a four horse stable, say 4 lbs. of salt dissolved in two buckets of water and poured through the nose of a watering pan over the floor of the stable an hour or so before you begin to move the manure, and the volatile salts of ammonia will become fixed salts from their having united with the muriatic acid of the common salt, and the soda thus liberated from the salt, will quickly absorb carbonic acid, forming carbonate of soda; thus you will retain with your manure, the ammonia that would otherwise fly away, and you have also a new and most important agent thus introduced, viz: the carbonate of soda. As this is a most powerful solvent of all vegetable fibre, and seeing that all manures have to be rendered soluble before they can act upon vegetation, it is apparent that the carbonate of soda thus introduced must be a most powerful agent.—*Gardener's Chronicle.*

### Cultivation of Grass.

Another modification in the cultivation of grass, which has been successfully practiced by Mr. D. Putnam, of Danvers, and others, is by sowing the seed among the corn at the last hoeing\*—taking care to have the ground left in a level and smooth condition. Repeated experiments have shown that the old practice of raising a hill about the corn is not attended with any benefit. If then, the smooth culture of the corn will aid in bringing the lands into good condition for grass, which is the principal object in view—our crops of barley, oats and rye, being raised merely as secondary objects of attention—does it not behoove our farmers to enquire whether their grass-seed cannot be advantageously sown in the summer or autumn, without any intermediate crop of grain?

*[\*One of the best set fields of timothy we have ever seen is a ten acre lot on the Canton property. The seed was sown among the corn at the last hoeing. The corn had been tended with the CULTIVATOR throughout the season, with the view of keeping the surface flat and smooth, and the seed, after being sown, was lightly harrowed in; this seed took well, and the plants being protected by the corn, grew off finely and covered the entire ground some six or eight inches in height. When the corn was gathered, the stalks were cut close into the earth, so that no impediment presented itself the ensuing season to the cutting of the grass. The ground was highly manured with STREET-DIRT and ASHES, for the corn crop, broad-cast, and was in the best possible condition to receive the timothy-seed and nurture the plants.—Ed. Amer. Farm.*

For the Michigan Farmer.

### The Whortleberry.

MR. EDITOR:—Your readers are not probably aware that the swamp whortleberry is capable of successful introduction into garden culture. A fact which I will state seems to prove this. A gentleman in Plymouth, Wayne Co., has a little whortleberry tree growing in his garden which was transplanted from a marsh about 10 years ago. It is about 10 feet high, and about 1½ inch in diameter at the root. It stands in a rich sandy upland soil. I have eaten of the fruit, and found it improved in size and equal in flavor to that produced in the swamps. The yield is said to be more abundant and more certain.

The tree is watered daily in very dry weather, and perhaps might not do well without it. And I would suggest that if efforts to cultivate in a dry soil be not successful, a more moist one be tried.

I would also suggest that the smaller variety growing on the openings be tried. I think they would flourish as well with the same treatment as currant bushes, and surely this delicious fruit is worth rescuing from the extinction that seems to await it; for it is much more palatable than the currant, and requires less sweetening. N. H.

### New Varieties of Corn.

Many of our readers may be familiar with the method which President Knight made use of to obtain new varieties of fruit by crossing previously existing sorts. The same means may be used to propagate new varieties of corn. Let the different kinds be planted in near proximity, as for instance in alternating rows, and they will intermix more or less freely. But this will be greatly facilitated by artificially removing parts of the flowers. It is well known that in order to render the ears fertile, that is, to cover the cob with grains, it is necessary that the pollen or fine dust from the staminate flowers which constitute the tassels, should impregnate the germ through the pistils or silk which covers the ears. To obtain a cross therefore, between two selected varieties, if we wish to transfer the grains of one to the cob of the other, let the latter be planted among the hills of the former, and then cut away the tassels, leaving the tassels or staminate flowers of the surrounding plants to impregnate the ears thus deprived of their own staminate flowers. Like most hybrids, the character of the new variety may not be developed until the second year.

Those who have different sorts favorably situated for such experiments, should be prepared to attend to them during the latter part of summer, taking care that impregnation has not already taken place before the staminate flowers are removed.—*Alb. Cult.*

**CABBAGE SPROUTS.**—Very few people take half the pains they ought with cabbages. When they are cut—no matter how—the stumps are left to bring sprouts; no matter when, nor how many. Now the fact is, that when the sprouts begin to come, they should all be rubbed off but the best—or at most, two; instead of which, a multitude of small ones are allowed to grow, not any of which bring good hearts, and all are, for the most part, but a poor apology for greens. When a

cabbage is cut, the leaves should be cut off the stem, and as soon as the buds of the stump begin to grow, rub off or cut all that are not wanted, leaving one of the strongest and best to grow in to a head, which it will do in an incredibly short time; equalling, and more frequently excelling the first head itself, in flavor and appearance.—*Far. Mon. Vis.*

From the Horticulturist.

### A Preventive to the Mildew in the Gooseberry.

BY NEW-JERSEY.

DEAR SIR:—Almost every body is discouraged with trying to raise the Gooseberry in this country, on account of the *mildew* or *rust*, which destroys the fruit. I have made a good many experiments for the last 15 years, to find out, if possible, some simple mode of preventing this, but entirely without success, until three years ago, I hit upon a mode which has given me great satisfaction in growing this fruit.

My mode of preventing the mildew, is very simple. It consists in covering the soil under the bushes with salt hay about three inches thick.—This should be done early; say when the blossoms begin to open. Whether it acts as a shield to preserve the roots, and thereby the whole system of the plant, from the sudden changes of weather, which the scientific say bring about the mildew, or whether it acts as a stimulant, I am not able to say.\* It is sufficient for me that I have never had the least appearance of mildew under the bushes which I have treated in this way, since I began to apply it; while others in the same garden have been totally covered with it. I leave the salt hay on all summer. By autumn, it is pretty well rotted, and I then dig it in, and it promotes the growth of the tree next year.

If you think this simple mode of preventing mildew, which I have found so successful, will interest your readers, I shall be glad to have it made public in the Horticulturist.

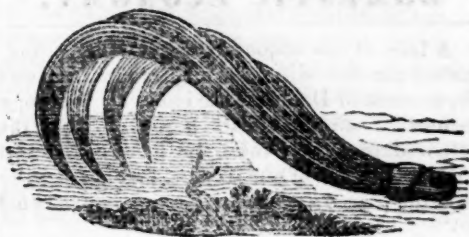
NEW-JERSEY.

**TO KILL MOSS ON BUILDINGS.**—Having read an article in a late number of the *Cultivator*, recommending white lead for killing moss on the roofs of buildings, which may be a very good one, I will mention what I think an economical one. Take wood-ashes or lime, and sprinkle them on the roof, near the top, just before a rain, and I think it will kill it as effectually as any thing. If people would wash the roofs of their houses once in three or four years with lime and water, they would not be troubled with moss on them.

By the way, I would recommend to those who are about to cover their buildings with shingles, and especially sawed shingles, to dip them in boiling tar, pitch, or rosin; say, dip the butt ends eight or nine inches and out again, as soon as you will, and enough will penetrate into the shingles to preserve them, I think, double the time that they would last without going through this process.—*Boston Cultivator.*

\* The salt does not, we think, act specifically in preventing mildew; as we have tried it, spread upon the soil, with no effect. Yet we have heard such good accounts from several persons this season, of this very mode of using salt hay, that we think very favorably of it, and recommend it for trial.—Ed. Hort.

### The Brush or Root Puller.



This is a very useful implement to attach to bushes, clumps of roots, and bogs, for the purpose of pulling them out of the ground. It is made with two, three or four claws. These are hooked to the bush close to the ground, an ox chain is then hooked into a hole at the other end of the puller, the cattle attached, when the bush and roots are easily hauled out. They are great labor savers in clearing new lands or bushy pastures.

**HARVESTING BEANS.**—The proper method of operation in performing this work is well known to all who have long been in the habit of reading agricultural papers. But as we find many are still unacquainted with it, and still pursue the old way of laying the beans upon the ground when pulled, to remain at the mercy of the elements until it is found convenient to carry them into the barn, and as many a good crop has been lost by this needless exposure, we repeat, the directions for securing them aright.

Prepare poles about 5 feet in length, and stick one firmly in the ground in the centre of every square of 3 or 4 rods diameter, throughout the bean patch. Lay a little dry straw around the pole, and on that, as the beans are pulled, lay them with the roots to the pole in a circle around it. Continue until the pile nearly reaches the top of the pole, then wind a wisp of straw or hay around it, to shed off the rain, and the work is done.

Beans secured in this manner, may be kept in perfect security until late in the fall, and will then be found dry and in excellent condition for thrashing. The labor, on the whole, is no greater than that of the more slovenly way, while the safety in case of storms is so much clear gain.

**GRAPES.**—Grapes, designed for preservation till winter should be gathered by cutting off the stems with scissors, and the cut end covered over with sealing wax. If any of the berries have recently fallen off, the stem part should be served in the same manner. The wax prevents the grape from shrinking.—*Ex.*

It is said that barrels in which salt has been packed, are a certain preventive against insects for fruit or grain packed in such barrels. Thus old salt barrels will become valuable.—*Ex.*

**YELLOW LOCUST.**—If you have but little fencing timber fit for posts on your farm, sow a few pounds of yellow locust seed, and when the plants are two years old they may be transplanted. In twelve years from the time the seed is sown, you may begin to cut them for posts.—*Farm. Cab.*



## DOMESTIC ECONOMY.

A lady of our acquaintance has kindly furnished the following useful articles for our department of Domestic Economy. We hope to receive similar favors hereafter from the same source. Are there no items of this sort known to others of our readers, that are worthy of being passed around for the common benefit?

**MR. EDITOR:**—When I was "out west" a short time since, I ate some excellent *Marmalade* made of wild plums: perhaps some of your readers would like the recipe for making it.

### PLUM MARMALADE.

Put your plums into a tin or brass kettle, with just enough water to cook them, cover them closely and boil them till they are done. Rub them through a colander or tin sieve, and to each pound of pulp or juice put a pound of sugar. Boil it a long time, till the *marmalade* becomes quite thick. Be sure to stir it constantly while boiling.

All marmalades are made in the same manner. The *parings* of quinces may be kept separate from the cores, and prepared as above.

Common brown sugar should never be used for sweetmeats without cleansing. It prevents fermentation and the alcoholic taste that follows.

### RECIPE FOR CLEANSING SUGAR.

To each pound of sugar, add one table spoonful of coarsely powdered charcoal, and to every five pounds of sugar, add the white of one egg and a pint of cold water; stir the whole together, thoroughly, place it over the fire and boil 15 minutes. After taking off the thick scum, strain the syrup through a cloth till it is perfectly clear, then boil it till it is as thick as melted sugar before adding your fruit.

[We take the liberty of suggesting that the charcoal, after being powdered coarsely, be put into a sieve, the dust separated, and only the coarser part added to the syrup. We think this would make less straining necessary.—Ed.]

### TOMATO JELLY.

Take ripe tomatoes, wash them and cut them up, without peeling, boil them ten or fifteen minutes, then sift them. To each pound of the tomatoes thus prepared add one pound of sugar cleansed and boiled down; boil them together till they jelly, stirring constantly.—There is danger of boiling jelly too much, it is well to try it often, while boiling, by cooling a little.

### PICKLES.

A good brine for pickles is made by putting one quart of salt to every pail full of water, and one pound of alum to a barrel of pickles. Stir up your pickles every time you

add new ones, that the scum may all rise to the surface.

### DRYING PEACHES.

In preparing peaches to dry, pare and slice them; then add 4 or 5 lbs. of sugar to half a bushel of peaches. Just scald the sugar and fruit together, and spread on plates to dry, juice and all. Turn them occasionally.

All kinds of fruit are better dried in this way, and require less sugar when stewed.

Plums, of course, should not be pared, and they would be better if the quantity of sugar were increased. E.L.L.A.

### PEACH PRESERVES.

The best peaches for sweetmeats are cling-stones, such as are of a pure white or yellow color to the stone. Those having any admixture of red will not keep as well. The late Newington is an excellent variety. The fruit when not yet fully ripe, certainly not soft, must be picked by hand, so as to avoid all bruises. Having prepared a kettle of very strong lye, which is kept at a boiling heat, a sufficient number of peaches to cover the surface is dropped into it, and there allowed to remain until the *outer surface* skin begins to break, which, if the lye is sufficiently strong, will require *but a few moments*. They are then taken out—some one being ready to take them up, one at a time, and rub off the downy scurf with a coarse rough cloth. When this is well done, the skin of the fruit will resemble that of the nectarine in smoothness. As they are thus cleaned (rubbed) they are *at once* dropped into cold water to prevent the discolored effect of the lye.

Take crushed lump sugar, in the proportion of 4 lbs. of sugar to 5 lbs. of peaches intended to be preserved, and add to it water sufficient to dissolve it; beat up the whites of eggs to a stiff froth, which, with the shells broken up, add to the syrup. Let the syrup now boil freely for five minutes, carefully skimming off the froth that may rise; then strain through a linen napkin. Add the fruit; boil moderately and steadily from two to two and a half hours, according to the size of the fruit—when done, they will be transparent. If freestones are used, an incision is made on one side of the fruit, when the stones boil out in the syrup and are removed. Large cling-stones may be used, even if very acid, which they will be if red at the stone; they are cut in two, the stone taken out and the fruit dropped in lime-water and allowed to remain about an hour, to neutralize the acidity and give firmness.

The above directions are given in substance as prepared by Mrs. Aspleck for the American Agriculturist.

### To Butter Makers.

**MESSES EDITORS.**—As the season of butter manufacture progresses, it may not be amiss to hint to your numerous subscribers engaged in the same, to be careful and not salt their butter too much—keep it in new white-oak firkins of 50 and 100 lbs.—proportioned to the number of cows—which are perfectly airtight. One half-inch salt at top and bottom, without brine, unless to soak the firkin, is all sufficient; keep it in a cool cellar until frost comes, and then forward it to market. It is atmospheric air which ruins butter, and if kept free from it in cool situations it will keep sweet for years. **A BUTTER DEALER.**

—N. Y. Tribune.

### Preserving Eggs.

Many receipts are given for preserving eggs, all strongly recommended, and many of them failing in trial. They may be successful in one case, but varying circumstance may cause a different result. For instance, lime water may be very successful when of the right degree of strength or causticity; but skill appears to be required in managing properly such preparations. Some have been very successful by packing them in salt, plaster of Paris, and other pulverulent substances, with different degrees of success. But the main point appears to be to pack them in some soft or powdery substances, with the *small end downwards*, in an exactly perpendicular position, and so embedded that they shall never touch each other. Provided these requisites are strictly attended to, it does not appear to be very important what they are packed in; we have been uniformly successful in the use of salt, never failing in keeping them for a year, and a neighbor in one case kept them three years in a perfectly sound state.—*Alb. Cult.*

From Thomas' Fruit Culturist.

### Plundering Fruit.

The morality of some Americans, whatever it may be on other points, is, on this, far behind the ages of barbarism. A large part of our population is brought up to regard fine fruit,—wherever it may be growing,—whatever of money, and time and labor, and patience, it may have cost the public-spirited owner,—as common plunder. Hence the great uncertainty and slim hope, with which many regard all attempts to possess this delicious luxury. Why the young man, who pilfers from the pocket book, is to be scouted from society,—while he, who takes what has cost the owner more, what he values more, and which money will not replace, is allowed to run at large, is one of the anomalies of the times.

The native fruit of a thickly populated country, growing without culture, and free for all, has doubtless had its share in producing this laxity of morals. 'I would sooner have a hundred Irishmen round me than one Yankee,' was the declaration of a sufferer,

whose fruit had been plundered near the line of the Erie canal, when that great work was in progress. But Europeans are generally more exemplary on this point than Americans—shame to us! When Professor Stowe was in Prussia, where the roads are lined with fruit trees by order of the government, he observed a wisp of straw attached to particular trees, to protect the fruit; a sufficient guard; but he suggested to the coachman, that in America, it might only prove an invitation to plunder. 'Have you no schools?' was the significant reply.

Yes, we have schools; but how many where the child is taught to respect his neighbor's property? Too often he acquires literature and vice at the same time. The state of New-York is famous for her schools and her prisons: the latter to supply the defects of the former system, which they do however, very imperfectly. **TEACH HER CHILDREN TO BE HONEST**, and then with science and literature, a foundation for true greatness and prosperity would be laid.

For the Michigan Farmer.

### Experiment in Driving Bees.

**MR. EDITOR:**—Having practiced upon the suggestions in your last No., for taking honey from bees, it may not be amiss to give the result of the experiment. The swarm selected for the purpose had been hived about five weeks, and was remarkably large and active, having within that time filled the hive. Taking another hive about the same size, I proceeded to manage them according to the directions, in which I was quite successful. On examining the vacated hive, I found the contents nearly worthless, from the number of young bees, grubs, &c., filling to a great extent the cells. This I had apprehended,—but had hoped to find the honey deposited in parts of the hive not occupied by the young bees. The bees, after working faintly for a few days, left the hive for parts unknown. Thus you perceive that as far as my experiment is concerned, it may be set down as a decided failure. I am satisfied that other plans are preferable to this, such for instance, as the use of caps, patent hives, &c.

Some of my neighbors have used boxes, placed under the hive, in which they appear to have been successful. The boxes are usually from 4 to 6 inches deep, corresponding otherwise with the size of the hive, and are furnished with a cover pierced so to admit the bees down from the hive above.

I. M. DIMOND.

Jackson, July 15th, 1846.

We should be glad to hear whether the plan above tried so unsuccessfully, has been equally a failure with others. **ED.**

### How can we get rid of Sorrel?

In going about the country recently, we remarked many fields, the soil of which was capable of being turned to much better account, overgrown to a greater or less extent with sorrel. In some, so completely had this sour weed taken possession, that the fields might about as well have been thrown open to the common, for any purpose of profit or usefulness they answered to their owner. The question occurred, is there no way in which these lands can be redeemed, and this pest exterminated, or must it be allowed to occupy the ground until nature shall introduce some other plant to root it out?

Unquestionably, its eradication is a matter of some difficulty, where it has been allowed to gain a foothold. The long jointed roots extend themselves freely through a light, permeable soil, new plants shoot up from them, and thus the "patches" spread. In addition to this, if the ground is cultivated, the plow, as commonly used, only aids the propagation, carrying the roots to portions of the field before exempt, and leaving them to form new plantations. When the land is plowed at any usual depth, the sorrel soon makes its way through the upturned soil, and resumes its growth. We know of no grain which can flourish on land so occupied, or compete with such an enemy. Hence, when found once fairly introduced into a field, it would seem economy to set immediately about the work of extermination, if there is any way by which this can be effected; and we have not the least doubt that some such way there is.

Several methods have been suggested for accomplishing this object. One is, to apply a copious dressing of lime or ashes, while the patches are yet small, to neutralize the acids of which it is supposed the soil whereon it grew must be full. This remedy seems to have been found one of doubtful efficacy,—in some instances having been reported of favorably, in others and more frequently having produced no effect. The better opinion now appears to be that sorrel does not derive its acid from the soil, but from the atmosphere, and if so, no application of an alkali to the former, can probably avail.

Another proposed remedy is to manure the infested ground richly with stable manure.—This, with thorough cultivation, it is said, will run the sorrel out.

Stocking down with clover, and applying plaster, is recommended. The clover will thus get a thrifty growth, and the sorrel will disappear. For this object, (as indeed for any other,) the clover should be sown thickly—not less than 10 or 12 pounds of clean seed, or eight or ten bushels of chaff to the acre.

We are persuaded that sorrel may also be

exterminated by the plow. Double or trench plowing, or plowing with Smith's subsoil plow, we think would be likely to do it. The same course also which has been found effectual in destroying the Canada thistle, would, we apprehend succeed in this case; viz: to plow thoroughly just as the weed is in blossom, and then repeat the plowing at intervals of three or four weeks, or as soon as the enemy puts his head above ground, until he is 'done for.' This in the case of the thistle, will be at the fourth plowing, if the work has been thoroughly done—and then the ground is in fine condition for a fall crop.

We make the above suggestions with some diffidence, as we are unable to speak from direct experience or observation of the effect of any remedy, and we do it in the hope that some who have had occasion to learn the best way and means of proceeding, may be induced to benefit their brother farmers by communicating this important piece of knowledge.—From the appearance of some farms, it might be inferred that the owners had surrendered a large portion of their fields in despair. It is quite evident that such are unacquainted with any method by which they may resume the profitable use of their usurped lands, and we are sure he will receive their thanks as a benefactor who can give them the needed information.

P. S. Since writing the above, a farmer has given us an account of two experiments which may be of use. A field covered with sorrel, was plowed in November—the next June plowed again, and sown with buckwheat. This was plowed under before going to seed, and wheat sown. When the wheat was harvested, not a trace of sorrel could be seen, and none has appeared since.

In another instance, a piece of land also covered with sorrel was plowed once the last of May, and again in the beginning of July, and sown with buckwheat which was plowed in for wheat. In this case, also, the extinction of the sorrel appears to be complete.

### Manuring by Green Crops.

In our last number we published an article on this subject from the Cultivator, going to discountenance the practice of turning under a heavy growth of clover or other green crop, by way of improving the fertility of a soil, and recommending instead, on the authority of various distinguished farmers, that clover be depastured, or mown before plowing. The reasons and statements there given appear to have considerable force; but it may not be amiss to state that there is high authority, also, for the opposite opinion. A right decision of the question is highly important, especially to western farmers, many of whom have been ac-



customed to look to the source above alluded to,—namely, the turning under of green crops,—as their principal and cheapest means of keeping up the fertility of their lands, or of restoring it when exhausted. If we mistake not, it is the general opinion here, that when a field in clover is plowed, the soil is benefitted in proportion to the amount of vegetable matter given back to it, whether that matter lie in the stem and leaves, or root; and that, while there is unquestionably much benefit derived from the roots alone, there is more, if to the roots is added the whole of the full-grown plant. Should it be found, however, that this opinion is erroneous, and that the soil is better off without a heavy mass of green vegetable matter than with it, the farmer will, of course, save himself the loss of the crop of clover, by having it first depastured or mown before plowing.

For ourselves, we feel unwilling to give up, until compelled by force of evidence, this cheap, wholesale method of manuring, and incline to think that the addition of a large amount of carbonaceous matter, in the shape of leaves and stems, *must* be ultimately beneficial, especially to a meagre soil. It seems not unreasonable, too, to suppose that the presence of a large mass of succulent vegetables, well buried in the soil, and undergoing decomposition, would furnish a prolific source of moisture, and serve as a protection against drouth. With reference to the prominent objection, the production of acidity, might not any injury from this source (if found to ensue as asserted,) be cheaply averted by a light dressing of ashes before or after plowing. It is understood, however, that in the decomposition of *barn-yard*, as well as green manures, acids are formed; yet we do not see this fact assigned as an objection to their use in such manner that their decomposition may take place in the soil: on the contrary, this practice is commended by our best farmers.

At all events, it appears to us that in case of a subject so important, the light of much experience is needed, before it should be considered as conclusively settled:—and especially is caution proper, when we see high authorities at variance. We wish some of our readers would contribute what they can to help determine the matter, and meanwhile we give the following enumeration of the advantages of green manuring by Prof. Johnson, an eminent agricultural chemist of Dublin.

1. "The ploughing in of green vegetables on the spot where they have grown may be followed as a method of manuring and enriching all lands, where other manures are less abundant. Growing plants bring up from beneath, as far as their roots extend, those substances which are useful to vegetation—and

retain them in their leaves and stems. By ploughing in the whole plant we restore to the surface what had previously sunk to a greater or less depth, and thus make it more fertile than before the green crop was sown.

2. The manuring is performed with the least possible loss by the use of vegetables in the green state. By allowing them to decay in the open air, there is, as above stated, a loss both of organic and inorganic matter—if they be converted into fermented (farm yard) manure, there is also a large loss, as we shall hereafter see; and the same is the case, if they are employed in feeding stock, with a view to their conversion into manure. *In no other form can the same crop convey to the soil an equal amount of enriching matter as in that of green leaves and stems.* Where the first object, therefore, in the farmer's practice is, so to use his crops as to enrich his land—he will soonest effect it by ploughing them in, in the green state.

3. Another important result is, that the beneficial action is almost immediate. Green vegetables decompose rapidly, and thus the first crop which follows a green manuring is benefitted and increased by it.

4. *It is said that grain crops which succeed a green manuring are never laid—and that the produce in grain is greater in proportion to the straw than when manured with fermented dung.*

5. But it is deserving of separate consideration, that green manuring is especially adapted for improving and enriching soils which are poor in vegetable matter. Living plants contain in their substance not only all they have drawn from the soil, but also a greater part which they have drawn from the air. *Plough in these living plants, and you necessarily add to the soil more than was taken from it*—in other words, you make it richer in organic matter. Repeat the process with a second crop and it becomes richer still—and it would be difficult to define the limit beyond which the process could no farther be carried."

#### The Sweet Scented Vernal Grass.

An article in the Farmer's Library attributes the high flavor of the famous Philadelphia butter to the cows feeding upon the above named grass, which grows abundantly in the pastures around that city. "It grows," says the writer, "about a foot or 18 inches high, rising above the surrounding grass. Its stem is very small and round, with a few long and slender leaves. Its odor will alone be sufficient to distinguish it from all other grasses found in our pastures. When in blossom, the air is often highly charged with its scent, and at this time I seldom ride into the country without gathering a handful of the grass to

enjoy its rich perfumes at leisure, and perhaps store it away in a drawer. As it is so very forward in its growth, (furnishing feed by the middle of April,) so does it show the earliest signs of decay. About the middle of June, the fields and meadows where it abounds assume a yellowish appearance from the dying of the stems of the first growth. The cattle press these aside to get a greener herbage, and now the high flavor of our butter declines."

"A chemical examination of the Sweet-scented Vernal Grass, shows that while its nutritious properties are less than those of most other grasses, it is distinguished from these by containing *benzoic acid* or *flowers of benzoin*, a substance possessing a peculiarly agreeable aromatic odor. An essential oil in which this resides can be distilled from the grass, affording a pleasant perfume. It is undoubtedly this aromatic ingredient that imparts to the milky secretion of the cow, the flavour so pleasantly manifested in Philadelphia Spring-grass butter. When we find milk so readily imbued with the peculiar flavors of garlic, turnips, and other substances upon which cows often feed, there can be no room to doubt that a fragrant grass freely eaten by cows, should likewise impart its particular flavor to the milky secretion.

If this very simple solution of the cause of the high flavor of Philadelphia Spring butter be true—and I have not the least doubt upon the subject, you can at once perceive that a pasture grass may be introduced almost everywhere, which will communicate an exquisite flavor to butter."

Johnson, in his Farmer's Encyclopedia, remarks of this grass, that it thrives best in lands that are deep and moist, and even in peat bogs. It also does better when grown with other different species than when alone. Cattle are not particularly fond of it, but eat it in pastures in common with others. It is valuable, however, in respect to early growth, and for the superior nutritive qualities of its latter-math, as it continues to vegetate and throw up flowering stalks till the end of autumn.

Such being its qualities, would it not probably constitute a valuable addition to intermix with timothy and red top, on the reclaimed natural meadows and low timbered lands of Michigan? We think it worthy the trial, and shall endeavor to procure some of the seed for that purpose.

☞ Subscriptions for "the Horticulturist" received here, and money forwarded free of charge.

☞ Broom-corn seed is said to be excellent to fatten sheep.

## Insects in a Nursery.

For the Michigan Farmer.

MR. H. HURLBUT:—I will now conclude that part of my statement in regard to the insects in my nursery which I accidentally omitted in my other communication. The insect works in the root of the tree, consuming the bark for its food. In some trees that I have examined, that were nearly dead, I could discern but one or two very small worms, only the 1-16 of an inch in length. It seems hardly possible that so small an insect can affect a tree 4 or 5 feet in height. But in every tree that I have found dead, may be found these insects. The worm does not penetrate the wood, but lies between the wood and bark. If you can give any information how to check their progress, you will oblige

THE YOUNG NURSERYMAN.

Raisin, June 20, 1846.

☞ We find no description in any authorities that we have consulted of the insect above referred to. We have suggested, however, the application of ashes around the roots of the trees, as a remedy. Ed.

By driving your business before you, and not permitting your business to drive you, you will have opportunities to indulge in innocent diversions.

## CONTENTS OF THIS NUMBER.

|   |    |
|---|----|
| The wheat harvest; The N. E. Farmer; The Horticulturist;  | 73 |
| The commentator. No. 4; A corn-marker and grain rigging;  | 74 |
| Education of Farmers' daughters; Deep plowing; Fall-gratting;   | 75 |
| Management of a good Farmer;  | 76 |
| Chapter on Apples;  | 77 |
| How to raise "giant" Asparagus;   | 79 |
| Michigan sub-soil or Trench Plow; Wheat among corn;   | 80 |
| Transplanting large trees; Experiment in wheat growing;   | 81 |
| Seed wheat;   | 81 |
| Manure; Cultivation of grass, Whortleberry; New varieties of corn; cabbage sprouts;                                 | 82 |
| A preventive to the mildew in the gooseberry; To kill moss on buildings; The bush or root puller; Harvesting beans; | 83 |
| Grapes; Yellow Locust;  | 83 |
| HOME-TIC ECONOMY—Plum Marmalade; Recipe for cleansing sugar; Tomato Jelly; Pickles; Drying Peaches;                 | 84 |
| Peach Preserves;  | 84 |
| To butter makers; Preserving eggs; Plundering Fruit; Experiment in driving Bees;                                    | 85 |
| How can we get rid of sorrel; Manuring by green crops;  | 86 |
| Sweet-scented Vernal Grass;   | 87 |
| Insects in a Nursery;   | 88 |

## MICHIGAN FARMER.

### TERMS FOR VOL. IV.

During the ensuing year, all subscriptions will commence with the volume. The price of a single copy is fifty cents. To clubs, a reduction is made, usually, five copies for \$2, eight copies for \$3; and in this proportion for any larger number. No reduction allowed unless payment be made in advance.

To former subscribers, and to all others who may be vouched for by any resident agent, the paper will be sent on a credit till October next. To all demands remaining unpaid on the 1st of January next, an addition of 25 per cent. will be made.

### ADVERTISEMENTS

Of agricultural implements, farms for sale, &c., would be inserted on our last page at \$1.75 per folio, for 3 months, or 75 cents for the first insertion, and 50 cents for each continuance. As the circulation of the Farmer is now probably greater than that of any other paper in the State, and as the number of advertisements is very limited, it is evidently a highly advantageous medium for advertising.

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